

**PATENT APPLICATION**  
**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of

Docket No: Q86272

Hirokazu KUBOTA, *et al.*

Appl. No.: 10/525,709

Group Art Unit: 1625

Confirmation No.: 7656

Examiner: Patricia L. MORRIS

Filed: February 24, 2005

For: NOVEL CRYSTALS

**DECLARATION UNDER 37 C.F.R. § 1.132**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

I, Dr. Hirokazu Kubota, hereby declare and state:

THAT I am a citizen of Japan;

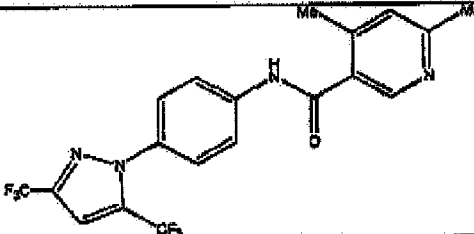
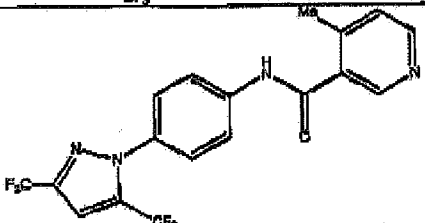
THAT I graduated from Osaka University, Department of Chemistry, Graduate School of Science in March 1989, and received a Ph.D. from Osaka University in March 2000;

THAT I have been employed by Yamanouchi Pharmaceutical Co., Ltd. (now Astellas Pharma Inc.) since April 1989, where I hold a position in Chemistry Research Laboratories; and

THAT I am familiar with the prosecution of the above-identified U.S. patent application, including the final Office Action mailed March 29, 2007, the Amendment Under 37 C.F.R. § 1.116 filed May 29, 2007, and the Advisory Action mailed June 4, 2007.



At page 3 of the March 2007 final Office Action, the examiner queries whether Applicants have "any factual support as to any unexpected or unobvious properties *vis-à-vis* the prior art compounds."

In response, I respectfully direct the examiner's attention to the following table containing a comparison of pharmacological activities.<sup>1</sup>

Compound	Structure	CRACC IC <sub>50</sub> ( $\mu$ M)	Selectivity vs. VOC
A		0.29	> 34
B (Ex. 112)		0.29	20

<sup>1</sup> The CRACC IC<sub>50</sub> ( $\mu$ M) and Selectivity vs. VOC values for Compound A, which were 0.30 and 33, respectively, in the table on pages 3 and 4 of the Amendment filed May 29, 2007, are now 0.29 and > 34, respectively. At first, the data had been treated with one significant digit (i.e., 0.3  $\mu$ M). The data has since been recalculated using two significant digits (i.e., 0.29  $\mu$ M), for presentation in a scientific meeting and for submission of a paper. As a result, the change to 0.29 and > 34 was necessary.

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<p><b>C</b> (Ex. 6)</p>		<p>0.40</p>	<p>17</p>
<p><b>D</b></p>		<p>1.6</p>	<p>ND</p>

The table above compares the presently claimed compound (Compound A) and three types of comparative compounds in terms of CRACC inhibitory activity and selectivity. Compound B and Compound C are respectively the compounds of Ex. 112 and Ex. 6 disclosed in JP 2000-256358. Compound D is a compound that differs from Compound A only at the position at which the methyl bond is substituted (not disclosed in the applied combination of art). "ND" in the table above means "not determined."

The comparative compounds above are not compounds disclosed in the Kubota and Betageri references. However, it is my understanding that an applicant may compare the claimed subject matter with prior art that is closer to the claimed subject matter than the prior art relied upon by the examiner. In the comparison table above, I compare the presently claimed

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compound to comparative compounds having structures that are closer to the structure of the presently claimed compound than those structures found in the applied prior art.

From the results shown in the comparison table, it is apparent that Compound B and Compound C have lower VOC selectivity than Compound A, though the CRACC inhibitory activity itself is almost maintained.

In addition, the table shows that Compound D has decreased CRACC inhibitory activity. This means that the mere introduction of a methyl group is not sufficient and that the position of the substitution is also important.

Thus, it is apparent from the comparison table above that Compound A has particularly preferable activity in comparison to other compounds having similar structures, so that Compound A achieves unexpectedly superior effects in terms of CRACC inhibitory activity and its selectivity.

I declare further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: June 26, 2007

Hirokazu Kubota  
Dr. Hirokazu KUBOTA